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09/978,592	10/18/2001	Thomas E. Slowe	37112-174878	5238

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EXAMINER

PARSONS, CHARLES E

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/978,592

Applicant(s)

SLOWE ET AL.

Examiner

Charles E Parsons

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Haskell in view of Matsuoka.

Claim 1,21, 25, 26, 27, 28, 29. A computer-readable medium having software for editing a decomposed original video sequence, said decomposed original video sequence comprising one or more original camera-motion layers and zero or more original fixed-frame layers decomposed from an original video sequence, said software comprising:

(See Haskell column 1 lines 51-53)

code segments for editing at least one of said original camera-motion layers to obtain modified camera-motion layers such that each frame of a composite modified video sequence composed from said modified camera-motion layers and said original fixed-frame layers is obtained without editing each frame of said original video sequence, (See Haskell column 1 line 60 through column 2 line 11

said editing comprising performing an edge operation to one of said original camera-motion layers. (While Haskell does not teach editing by way of performing an edge operation Matsuoka does. See Matsuoka figures 2, 3 and 4 as well as column 6 lines 53-61 and column 4 lines 58-65. Matsuoka makes mention of doing edge extraction to video images and shows the extraction in figure 2, See item numbers 23-27 in figure 2. At the

time the invention was made, it was well known in the art that once a video frame had been separated in to different object layers, a particular layer could be edited and the modification would be carried through the entire sequence. Therefore it would have been obvious to one of ordinary skill in the art, to utilize an MPEG 4 compliant encoder, in order to edit various object planes. One would have been motivated to do so by a desire to have a flexible editing device. See Haskell column 2 lines 12-19 wherein he teaches the advantages of MPEG 4)

Claim 2, 22. A computer-readable medium as in claim 1, wherein said code segments for editing original camera-motion layers comprise:

code segments for converting one of said original camera-motion layers to said original image; (See Haskell figure 2 as well as Matsuoka figure 3)

code segments for performing said edge operation to said original image to obtain an edge image; (See Matsuoka figure 2)

code segments for editing said edge image to obtain a modified image; (See Matsuoka figure 3) and

code segments for converting said modified image to one of said modified camera motion layers. (See Matsuoka column 10 lines 17-60)

Claim 3, 23. A computer-readable medium as in claim 2, wherein said code segments for editing said original camera-motion layers further comprise:

code segments for rectifying said original image prior to performing said edge operation;

and code segments for rectifying said modified image prior to converting said modified image. (According the Applicants own specification, Rectification of an image is defined as re-projecting an image of a 3D world onto a 2 dimensional image plane. As can be seen from figure 2 of Matsuoka the image taken, is of a 3D space thus the image must be rectified.)

Claim 5. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for replacing one of said original camera-motion layers with another camera-motion layer to obtain one of said modified camera-motion layers. (See Haskell figures 1a-1d)

Claim 6. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for adding a video sequence to one of said original camera-motion layers to obtain one of said modified camera-motion layers. (See Haskell column 4 lines 20-37)

Claim 7. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for adding an animation sequence to one of said original camera-motion layers to obtain one of said modified camera-motion layers. (See Matsuoka column 6 lines 53-62.)

8. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for adding a three-dimensional object to one of said original camera motion layers to obtain one of said modified camera-motion layers. (See Haskell figure 30

9. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for adding a user-activated region to one of said original camera-motion layers to obtain one of said modified camera-motion layers. (See Matsuoka column 6 lines 53-61)

Claim 4. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for inserting a portion into, deleting a portion from, or changing a portion of one of said original camera-motion layers to obtain one of said modified camera-motion layers.

10. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for modifying an on/off time of one of said original camera-motion layers to obtain one of said modified camera-motion layers.

11. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for modifying an opaqueness of one of said original camera-motion layers to obtain one of said modified camera-motion layers.

12. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for modifying fade-in/fade-out of one of said original camera-motion layer to obtain one of said modified camera-motion layers.

13. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:

code segments for modifying an ordering of one of said original camera-motion layers with respect to other layers of said decomposed original video sequence to obtain said modified camera-motion layers.

14. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:  
code segments for deleting one of said original camera-motion layers of said decomposed original video sequence.
15. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:  
code segments for adding another camera-motion layer to said decomposed original video sequence, such that an ordering of said original camera-motion layers with respect to other layers of said decomposed original video sequence is modified to obtain said modified camera motion layers.
16. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:  
code segments for modifying a size of one of said original camera-motion layer to obtain one of said modified camera-motion layer.
17. A computer-readable medium as in claim 1, wherein said code segments for editing said original camera-motion layers comprise:  
code segments for editing camera motion parameters of one of said original camera motion layer to obtain modified camera motion parameters.
18. A computer-readable medium as in claim 17, wherein said code segments for editing camera motion parameters comprise:  
code segments for adjusting at least one of said camera motion parameters to obtain said modified camera motion parameters.
19. A computer-readable medium as in claim 17, wherein said code segments for editing camera motion parameters comprise:  
code segments for replacing said camera motion parameters with analytically-derived camera motion parameters to obtain said modified camera motion parameters.

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Claim 20 A computer-readable medium as in claim 17, wherein said code segments for editing camera motion parameters comprise:  
code segments for rectifying said modified image prior to converting said modified image.  
As for claims 4 and 10-20 and 24 these are all features of Adobe photoshop a well known image editing package available off the shelf. At the time the invention was made there were several video editing packages available capable of the features claimed. Therefore it would have been obvious to one of ordinary skill in the art to incorporate them into a video editing system motivated by a desire to simplify use and minimize cost.)  
Official notice served.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 30, 31 rejected under 35 U.S.C. 102(e) as being anticipated by Mirando.

30. A computer-readable medium having software for implementing a video coloring book. (See Mirando abstract.)



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31. A computer-readable medium as in claim 30, said software comprising code segments for editing at least one camera-motion layer. (See Mirando column 3 lines 15-45)

5. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirando as applied to claim 30 above, and further in view of Haskell.

32-34. A computer-readable medium as in claim 31, wherein the camera-motion layer is decomposed from a video sequence. While Mirando does not decompose his image from a video layer, Haskell does. At the time the invention was made decomposing images was well known in the art and a feature of the MPEG 4 standard. Therefore it would have been obvious to one of ordinary skill in the art to derive the motion layers from decomposed images. One would have been motivated by the fact that the MPEG 4 standard allows for the flexibility to modify a particular object layer and carry that modification throughout the video sequence. See Haskell abstract as well as column 2 lines 12-19

33. A computer-readable medium as in claim 31, herein the camera-motion layer is an image. (See Mirando figure 2)

34. A computer-readable medium as in claim 30, said software comprising code segments for editing at least one fixed-frame layer. (See Mirando column 3 lines 36-52)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Parsons whose telephone number is 703-305-3862. The examiner can normally be reached on M-TH 7AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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